Plant Summary Report

National

Multiple States [50]

Investment: Capped¹

Lines Above \$10K Loop Investment = 132,299

Aggregate Support Data	0 to 10	11 to 50	51 to 150	151 to 500	501 to 2000	2001 to 5000	> 5001	Total
Support Over \$20 Benchmark	\$ 1,587,179,975 \$ 6	,405,123,845 \$ 2	2,597,732,250 \$ 1	,877,431,028 \$	1,822,730,882 \$	775,350,129 \$	55,322,134	\$ 15,120,870,243
Support Over \$30 Benchmark	\$ 1,411,564,297 \$ 4	,811,420,046 \$ 1	1,437,771,957 \$	560,669,842 \$	86,825,887 \$	12,701,969 \$	443,164	\$ 8,321,397,162
Support Over \$40 Benchmark	\$ 1,236,160,109 \$ 3	,239,202,209 \$	471,891,068 \$	31,975,098 \$	1,568,303 \$	478,423 \$	103,046	\$ 4,981,378,256
Support Over \$50 Benchmark	\$ 1,061,250,330 \$ 1	,794,464,061 \$	62,937,781 \$	1,530,360 \$	507,951 \$	177,320 \$	81,356	\$ 2,920,949,159
Support Over \$60 Benchmark	\$ 887,687,967 \$	776,003,372 \$	5,533,310 \$	612,113 \$	254,642 \$	111,503 \$	65,661	\$ 1,670,268,568
Support Over \$70 Benchmark	\$ 717,906,995 \$	271,533,481 \$	829,406 \$	346,663 \$	161,100 \$	76,414 \$	50,256	990,904,315
Support Over \$80 Benchmark	\$ 557,743,235 \$	77,614,015 \$	429,516 \$	229,762 \$	119,731 \$	50,914 \$	36,560	636,223,734

Assumptions:

SPRINTDISCOUNTBASE.CSV, CapcostSprintDiscount.inf

BCPMSprintxls

 $^{^{1}}$ CBGs with Average Loop Investment per line over \$10,000 are capped at \$10,000

 $^{^{2}\,}$ The Cap is applied to the total loop investment and includes feeder and distribution.

Plant Summary Report

National Multiple States [50]

Investment: UnCapped¹

Density Group		0 to 10)	11 to 50)	51 to 150	ł	151 to 500)	501 to 2000		2001 to 5000)	> 5001		Total
Investment Per Line Data																
Loop Distribution Investment	\$	4,111	\$	2,095	\$	1,208	\$	750	\$	425	\$	339	\$	155	\$	689
Loop Feeder Investment	\$	1,890	_\$_	597	\$_	381	\$_	277	\$	190	\$_	153	\$	109	_\$_	258
Total Uncapped Loop Investment	\$	6,001	\$	2,692	\$	1,589	\$	1,027	\$	615	\$	492	\$	264	\$	947
Switch Investment	\$	245	\$	152	\$	127	\$	118	\$	113	\$	111	\$	110	\$	119
InterOffice Facilities	\$	7	\$	5	\$	4	\$	4	\$	3	\$	3	\$	3	\$	4
Other Investment	_\$_	353	\$	164	\$_	102	\$	71	\$	49	\$	42	\$	30	\$	67
Total Investment	\$	6,606	\$. 3,013	\$	1,822	\$	1,220	\$	779	\$	648	\$	406	\$	1,137
Cost Per Month Data																
Capital Cost	\$	102.30	\$	47.07	\$	28.64	\$	19.22	\$	12.33	\$	10,15	\$	6.45	\$	17.86
Operating Expense per Line	\$	11.34	_\$_	11.34	\$_	11.34	\$_	11.34	\$	11.34	\$	11.34	\$	11.34	\$	11.34
Total Cost per Line (Excluding Gross Reciepts Tax)	\$	113.64	\$	58.41	\$	39.98	\$	30.57	\$	23.67	\$	21.49	\$	17.79	\$	29.20
Line Data																
Loop Distribution Length		8,278		8,148		6,242		3,805		1,992		1,164		651		2,910
Loop Feeder Length		65,014		30,823		21,712		15,527		11,610		9,532		6,505		14,363
Total Loop Length		73,291		38,972		27,954		19,332		13,602		10,697		7,156		17,273
Number of Households		1,410,926		12,743,132		9,087,971		11,266,453		28,469,972		22,867,583		11,054,052		96,900,089
Number of Residential Lines		1,549,773		14,088,715		10,170,515		12,690,579		32,201,003		26,104,200		12,967,147		109,771,932
Number of Single Business Lines		61,478		660,674		965,323		1,713,652		4,279,907		3,100,360		2,084,895		12,866,289
Multiple Business Lines		193,938		2,084,161		3,045,205		5,405,879		13,501,374		9,780,379		6,576,998		40,587,934
Total CBG Lines Served		1,805,189		16,833,550		14,181,043		19,810,110		49,982,284		38,984,939		21,629,040		163,226,155

Plant Summary Report

National

Multiple States [50]

Investment: UnCapped¹

Aggregate Support Data	0 to 10	11 to 50	51 to 150) 151	to 500	501 to 2000	2001 to 5000	 > 5001	Total
Support Over \$20 Benchmark	\$ 1,696,755,760	\$ 6,405,452,604	\$ 2,597,832,160	\$ 1,877,4	9,806 \$	1,822,751,335	\$ 775,398,726	\$ 55,339,041	\$ 15,230,979,431
Support Over \$30 Benchmark	\$ 1,521,140,082	\$ 4,811,748,804	\$ 1,437,871,867	\$ 560,6	8,620 \$	86,846,339	\$ 12,750,566	\$ 460,071	\$ 8,431,506,350
Support Over \$40 Benchmark	\$ 1,345,735,894	\$ 3,239,530,967	\$ 471,990,978	\$ 31,9	3,877 \$	1,588,756	\$ 527,020	\$ 119,953	\$ 5,091,487,444
Support Over \$50 Benchmark	\$. 1,170,826,115	\$ 1,794,792,819	\$ 63,037,691	\$ 1,5	9,139 \$	528,403	\$ 225,917	\$ 98,263	\$ 3,031,058,347
Support Over \$60 Benchmark	\$ 997,263,752	\$ 776,332,130	\$ 5,633,220	\$ 6	0,892 \$	275,094	\$ 160,100	\$ 82,568	\$ 1,780,377,756
Support Over \$70 Benchmark	\$ 827,482,780	\$ 271,862,240	\$ 929,316	\$ 30	5,442 \$	181,552	\$ 125,011	\$ 67,163	\$ 1,101,013,503
Support Over \$80 Benchmark	\$ 667,319,020	\$.77,942,774	\$ 529,426	\$ 2	8,541 \$	140,183	\$ 99,511	\$ 53,467	\$ 746,332,922

SPRINTDISCOUNTBASE.CSV, CapcostSprintDiscount.inf BCPMSprintxls

¹ The Average Loop Investment per line

Armis Report Format

National

Multiple States [50]
Investment: Capped¹

mvestmem. Capped	,						
Lines Above \$10K Loop Inv:	132,299		Small			Medium	
	Account		Capped			Capped	
Account Description	Number	L	Investment	%		Investment	%
Plant In Service							
Land & Support	2110	\$	915,975,066		\$	711,075,382	
COE Switch	2210	\$	1,048,673,030		\$	895,126,336	
COE Circuit	2230	\$	1,863,443,788	- 1	\$	1,526,253,719	
Poles	2411	\$	1,629,768,781	•	\$	1,092,246,635	
Aerial Cable	2421	\$	2,552,940,640	24.81%	\$	1,758,916,601	23.06%
Underground Cable	2422	\$	732,388,133	7.12%	\$	821,440,744	10.77%
Buried Cable	2423	\$	7,003,994,881	68.07%	\$	5,046,676,021	66.17%
Conduit	2441	\$	714,726,488	_	\$	793,014,566	_
Total Plant in Service		\$	16,461,910,807		\$	12,644,750,004	
Plant Specific Expenses		Γ	Amount	%		Amount	%
Network Support	6110	\$	10,907,267	0.56%	\$	11,499,809	0.679
General Support	6120	\$	87,843,762	4.52%	\$	92,615,907	5.37
COE Switch	6210	\$	24,889,066	1.28%	\$	26,241,174	1.52
Operator Systems	6220	\$	658,828	0.03%	\$	694,619	0.04
COE Transmission	6230	\$	16,909,924	0.87%	\$	17,828,562	1.03
Information IOT	6310	\$	4,904,610	0.25%	\$	5,171,055	0.30
Cable & Wire	6410	\$	201,967,450	10.38%	\$	212,939,407	12.34
Plant Non-Specific Expenses		1		1			
Other PP&E	6510	\$	2,196,094	0.11%	\$	2,315,398	0.13
Network Operations	6530	\$	97,506,576	5.01%	\$	102,803,657	5.96
Depreciation/Amort	6560	\$	1,114,660,764	57.31%	\$	850,377,643	49.27
Marketing	6610	\$	25,913,910	1.33%	\$	27,321,693	1.58
Customer Opr Service	6620	\$	177,151,587	9.11%	\$	186,775,413	10.82
Executive & Planning	6710	\$	10,028,830	0.52%	\$	10,573,649	0.61
General & Adminis ration	6720	\$	157,093,928	8.08%	\$	165,628,115	9.60
Prov Uncollectibles	6790	\$	12,444,533	0.64%	\$	13,120,587	0.76
Total Operating Expense		\$	1,945,077,130		\$	1,725,906,688	-
Operating Taxes	ł	1			1		
Federal and State	7200	\$	695,094,917		\$	536,550,024	
Gross Receipts Tax	7240	\$	158,745,374	_	\$	131,684,674	
Total Tax	}	\$	853,840,292	-	\$	668,234,699	-
Return On Investment	1	\$	1,271,476,794		\$	982,388,728	

CBGs with Average Loop Investment per line over \$10,000 are capped at \$10,000

Assumptions:

SPRINTDISCOUNTBASE.CSV, CapcostSprintDiscount.inf

Armis Report Format

National

Multiple States [50]

Investment: Capped¹

Lines Above \$10K Loop Inv:	132,299		Large			Total	
1	Account		Capped			Capped	
Account Description	Number		Investment	%		Investment	%
Plant In Service		,					
Land & Support	2110	\$	9,305,445,956		\$	10,932,496,403	
COE Switch	2210	\$	17,518,228,114		\$	19,462,027,480	ŀ
COE Circuit	2230	\$	22,415,988,446		\$	25,805,685,953	1
Poles	2411	\$	8,436,459,725		\$	11,158,475,141	ļ
Aerial Cable	2421	\$	13,523,640,021	16.90%	\$	17,835,497,263	18.21%
Underground Cable	2422	\$	19,570,335,211	24.46%	\$	21,124,164,088	21.57%
Buried Cable	2423	\$	46,930,061,762	58.64%	\$	58,980,732,665	60.22%
Conduit	2441	\$	18,126,675,897		\$	19,634,416,951	
Total Plant in Service		\$	155,826,835,133		\$	184,933,495,943	
Plant Specific Expenses			Amount	%		Amount	%
Network Support	6110	\$	269,441,289	0.87%	\$	291,848,365	0.84%
General Support	6120	\$	2,169,996,961	7.03%	\$	2,350,456,631	6.80%
COE Switch	6210	\$	614,832,472	1.99%	\$	665,962,712	1.93%
Operator Systems	6220	\$	16,274,977	0.05%	\$	17,628,425	0.05%
COE Transmission	6230	\$	417,724,415	1.35%	\$	452,462,901	1.31%
Information IOT	6310	\$	121,158,164	0.39%	\$	131,233,829	0.38%
Cable & Wire	6410	\$	4,989,184,679	16.16%	\$	5,404,091,537	15.65%
Plant Non-Specific Expenses					ĺ		
Other PP&E	6510	\$	54,249,924	0.18%	\$	58,761,416	0.17%
Network Operations	6530	\$	2,408,696,627	7.80%	\$	2,609,006,860	7.55%
Depreciation/Amort	6560	\$	10,356,261,369	33.55%	\$	12,321,299,776	35.67%
Marketing	6610	\$	640,149,103	2.07%	\$	693,384,706	2.01%
Customer Opr Service	6620	\$	4,376,160,538	14.18%	\$	4,740,087,539	13.72%
Executive & Planning	6710	\$	247,741,320	0.80%	\$	268,343,799	0.78%
General & Administration	6720	\$	3,880,677,899	12.57%	\$	4,203,399,941	12.17%
Prov Uncollectibles	6790	\$	307,416,236	1.00%	\$	332,981,356	0.96%
Total Operating Expense	ł	\$	30,869,965,974	-	\$	34,540,949,792	-
Operating Taxes]	1					
Federal and State	7200	\$	6,715,667,135		\$	7,947,312,077	
Gross Receipts Tax	7240	\$	2,025,799,356	_	\$	2,316,229,405	
Total Tax	1	\$	8,741,466,491	_	\$	10,263,541,482	-
Return On Investment	<u>L_</u>	\$	12,332,140,768		\$	14,586,006,291	,

¹ CBGs with Average Loop Investment per line over \$10,000 are capped at \$10,000

Assumptions:

SPRINTDISCOUNTBASE.CSV, Capco.tSprintDiscount.inf

BCPMSprint.xls

Armis Report Format

National

Multiple States [50]

Investment: UnCapped1

invesiment: UnCappe			Small	<u>1</u>	 Medium	
•	Account		UnCapped		 UnCapped	
Account Description	Number		Investment	%	Investment	%
Plant In Service						
Land & Support	2110	\$	931,721,010	I	\$ 716,799,480	Į
COE Switch	2210	\$	1,048,673,030		\$ 895,126,336	1
COE Circuit	2230	\$	1,880,013,101	j	\$ 1,532,091,432	
Poles	2411	\$	1,684,189,972	1	\$ 1,112,231,356	
Aerial Cable	2421	\$	2,612,760,377	24.85%	\$ 1,779,525,369	23.08%
Underground Cable	2422	\$	732,400,753	6.96%	\$ 821,451,871	10.66%
Buried Cable	2423	\$	7,170,339,449	68.19%	\$ 5,108,241,889	66.26%
Conduit	2441	\$	714,764,501		\$ 793,048,991	
Total Plant in Service		\$	16,774,862,192	•	\$ 12,758,516,724	
Plant Specific Expenses			Amount	%c	Amount	%
Network Support	6110	\$	10,907,267	0.55%	\$ 11,499,809	0.66%
General Support	6120	\$	87,843,762	4.47%	\$ 92,615,907	5.34%
COE Switch	6210	\$	24,889,066	1.27%	\$ 26,241,174	1.51%
Operator Systems	6220	\$	658,828	0.03%	\$ 694,619	0.04%
COE Transmission	6230	\$	16,909,924	0.86%	\$ 17,828,562	1.03%
Information IOT	6310	\$	4,904,610	0.25%	\$ 5,171,055	0.30%
Cable & Wire	6410	\$	201,967,450	10.27%	\$ 212,939,407	12.28%
Plant Non-Specific Expenses	ł	l				
Other PP&E	6510	\$	2,196,094	0.11%	\$ 2,315,398	0.13%
Network Operations	6530	\$	97,506,576	4.96%	\$ 102,803,657	5.93%
Depreciation/Amort	6560	\$	1,135,522,542	57.76%	\$ 857,950,838	49.49%
Marketing	6610	\$	25,913,910	1.32%	\$ 27,321,693	1.58%
Customer Opr Service	6620	\$	177,151,587	9.01%	\$ 186,775,413	10.77%
Executive & Planning	6710	\$	10,028,830	0.51%	\$ 10,573,649	0.61%
General & Administration	6720	\$	157,093,928	7.99%	\$ 165,628,115	9.55%
Prov Uncollectibles	6790	\$	12,444,533	0.63%	\$ 13,120,587	0.76%
Total Operating Expense	Ì	\$	1,965,938,908	-	\$ 1,733,479,883	•
Operating Taxes	}	1				
Federal and State	7200	\$	708,096,834		\$ 541,276,128	
Gross Receipts Tax	7240	\$	161,081,823		\$ 132,533,548	_
Total Tax	}	\$	869,178,657	_	\$ 673,809,676	_
Return On Investment		\$	1,295,185,583		\$ 991,006,542	

¹ The Average Loop Investment per line

Assumptions:

 $SPRINTDISCOUNTBASE.CSV, CapcostSprintDiscount.inf \\BCPMSprint.xls$

Armis Report Format

National

Multiple States [50]

Investment: UnCapped1

••	<u> </u>		Large	1		Total	
	Account		UnCapped			UnCapped	
Account Description	Number		Investment	%		Investment	%
Plant In Service				1			
Land & Support	2110	\$	9,318,554,925	1	\$	10,967,075,415	1
COE Switch	2210	\$	17,518,228,114		\$	19,462,027,480	
COE Circuit	2230	\$	22,429,339,260		\$	25,841,443,793	
Poles	2411	\$	8,482,465,406		\$	11,278,886,734	
Aerial Cable	2421	\$	13,573,147,647	16.92%	\$	17,965,433,393	18.25%
Underground Cable	2422	\$	19,570,458,989	24.40%	\$	21,124,311,613	21.46%
Buried Cable	2423	\$	47,068,020,411	58.68%	\$	59,346,601,749	60.29%
Conduit	2441	\$	18,127,161,756		\$	19,634,975,248	
Total Plant in Service		\$	156,087,376,507		\$	185,620,755,424	
Plant Specific Expenses			Amount	%		Amount	%
Network Support	6110	\$	269,441,289	0.87%	\$	291,848,365	0.84%
General Support	6120	\$	2,169,996,961	7.03%	\$	2,350,456,631	6.80%
COE Switch	6210	\$	614,832,472	1.99%	\$	665,962,712	1.93%
Operator Systems	6220	\$	16,274,977	0.05%	\$	17,628,425	0.05%
COE Transmission	6230	\$	417,724,415	1.35%	\$	452,462,901	1.31%
Information IOT	6310	\$	121,158,164	0.39%	\$	131,233,829	0.38%
Cable & Wire	6410	\$	4,989,184,679	16.15%	\$	5,404,091,537	15.62%
Plant Non-Specific Expenses	<u> </u>	Į.					
Other PP&E	6510	\$	54,249,924	0.18%	\$	58,761,416	0.17%
Network Operations	6530	\$	2,408,696,627	7.80%	\$	2,609,006,860	7.54%
Depreciation/Amort	6560	\$	10,373,602,626	33.59%	\$	12,367,076,006	35.76%
Marketing	6610	\$	640,149,103	2.07%	\$	693,384,706	2.00%
Customer Opr Service	6620	\$	4,376,160,538	14.17%	\$	4,740,087,539	13.70%
Executive & Planning	6710	\$	247,741,320	0.80%	\$	268,343,799	0.78%
General & Administration	6720	\$	3,880,677,899	12.56%	\$	4,203,399,941	12.15%
Prov Uncollectibles	6790	\$	307,416,236	1.00%	\$	332,981,356	0.96%
Total Operating Expense	j	\$	30,887,307,230	-	\$	34,586,726,022	=
Operating Taxes	}	1			}		
Federal and State	7200	\$	6,726,495,742		\$	7,975,868,704	
Gross Receipts Tax	7240	\$	2,027,743,964		\$	2,321,359,335	
Total Tax	}	\$	8,754,239,706	-	\$	10,297,228,039	-
Return On Investment		\$	12,351,888,040		\$	14,638,080,165	

¹ The Average Loop Investment per line

Assumptions:

SPRINTDISCOUNTBASE.CSV, CapcostSprintDiscount.inf

BCPMSprint.xls

Household Category Summary

National Multiple States [50]

> Total Annual Cost of Local Service = \$ 57,200,674,891 Uncapped State Average Monthly Cost= \$ 29.20 Capped State Average Monthly Cost= \$ 29.14

Capped

Investment Cost	Number of
Category	Households
\$0<=\$ 5	0
\$5<=\$10	0
\$10<=\$15	111,535
\$15<=\$20	17,632,157
\$20<=\$25	26,948,860
\$25<=\$30	17,328,564
\$30<=\$35	8,576,009
\$35<=\$40	5,555,209
\$40<=\$45	4,154,482
\$45<=\$50	3,236,526
\$50<=\$55	3,220,306
\$55<=\$60	2,590,902
\$60<=\$65	2,049,328
\$65<=\$70	1,569,694
\$70<=\$75	1,073,005
\$75<=\$100	2,070,606
\$100<=\$150	558,481
\$150<=\$200	222,265
\$200<=\$250	2,109
\$250<=\$300	19
\$300<=\$500	25
\$500<=\$1000	7
\$1000+	0
Total Households	96,900,089

Assumptions:

 $SPRINTDISCOUNTBASE.CSV, CapcostSprintDiscount.inf\\BCPMSprint.xls$

	Number of
Loop Category	Households
$0 \leq 5Kft$	8,067,851
5Kft <= 10Kft	22,083,798
10Kft <= 15 Kft	20,189,801
15Kft <= 20Kft	14,272,286
20 Kft ≤ 25 Kft	9,619,973
$25Kft \le 30Kft$	6,615,312
30Kft <= 40 Kft	8,015,170
40Kft <= 50 Kft	3,831,772
50 Kft ≤ 60 Kft	1,965,457
60Kft <=70Kft	945,263
70 Kft ≤ 80 Kft	503,113
80Kft <= 90Kft	272,859
90 Kft ≤ 100 Kft	171,804
100Kft <=150Kft	270,570
150 Kft ≤ 200 Kft	57,386
200Ktf+	17,674

Loop Information	Length
Minimum Loop Length	539
Maximum Loop Length	430,569
Average Loop Length	17,273
Lines Above \$10K Loop Inv	132,299

Sprint Input Changes to BCPM

- Switching costs reduced
- 11.25% Cost of Capital
- Revised depreciation lives
 - switching 12 years
 - circuit equipment 10 years
 - copper plant 18 years
- Structure sharing
 - 66% buried and manholes
 - 50% poles
- Copper and fiber material costs reduced 20%
- Sprint specific costs for
 - digital loop carrier (DLC)
 - feeder distribution interfaces

BCPM Results Sprint Input Data

Nationwide average cost/line/month: \$29.14

Nationwide total Costs: \$57.1B

USF Support at:

\$20 Bench Mark	\$15.1B
\$30 Bench Mark	\$8.3 B
\$40 Bench Mark	\$5.0 B

Proposed Workplan to Meet January 1, 1998 Implementation Date

- Adopt BCPM as Platform
- Address remaining issues
 - Switch costs
 - Input values for
 - cost of capital
 - depreciation
 - structure sharing
 - Low density areas
 - network quality
 - customer distribution



Attachment B

Bcpm Misc Inputs

Miscellaneous Inputs Cable & Wire Inputs

	FCC Filing	Sprint Run
CprMaxDistr	12,000	18,000
DropCostPerFoot	\$0.77	\$0.50
Cable Break Point	12000	15000



Attachment C



P. Michael Henderson Director, Network Access Products 714.221.4104 714.221.6544 Fax

February 13, 1997

Mr. Rod Thompson Via Fax 913.261.2450
Sprint Corporation
MS KSFRWA0302
2330 Shawnee Mission Parkway
Westwood, KS 66205

Dear Rod:

Thank you for your telephone call of today requesting that Rockwell document what's needed on the local loop for analog data communications. I have started the process of preparing this information and will forward it to you in letter format as soon as we have it available.

International modern standards are set by the International Telecommunications Union (ITU) in Geneva, Switzerland (formerly known as the CCITT). For data communications, the most demanding existing standard, in terms of local loop and network requirements, is the V.34 standard, including the extension to 33.6Kbps recently approved. For fax, a variation of V.34 has also been recently approved.

Each time a new modern standard has been developed, the designers have extended the modulation technique closer and closer to the theoretical limits of the network. This continues to be true with the new 56Kbps technique which the ITU is presently working to standardize. This technique uses bandwidth out to 4,000 Hz, the theoretical Nyquist limit, by equalizing the anti-aliasing rolloff of the codec.

Due to the FCC Part 68 limits on power, attenuation due to line length is one of the critical limiting factors for this technology, and has an important impact on V.34 and other existing modem standards. New data communications techniques over the local loop, such as digital subscriber line (DSL) techniques, are also extremely sensitive to line length due to attenuation, especially at higher frequencies. Loading coils will prevent the implementation of these new DSL techniques.

If you or anyone involved in this local loop issue would like to talk with technical people at Rockwell about these issues, I'd be happy to arrange a conference call. Thank you again for your call, Ron. I'll get the follow up letter to you as soon as I'm able.

Sincerely yours,

P. Michael Henderson

Director, Network Access Products